



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

CHARLES LEANDER DOOLITTLE

On the first day of March there passed on to high reward a distinguished astronomer and a lovable man. Astronomy of precision has long been indebted to the tireless energy and the painstaking exactness with which Professor Doolittle carried on his latitude observations. These were begun with very inadequate equipment, before the epoch of Dr. Chandler's investigations of the variation of latitude. The instruments used later at the Flower Observatory were of the most perfect construction, but the entire series of results for the Sayre Observatory at South Bethlehem as well as at the later station near Philadelphia were of the highest excellence. Probably no single contribution to the problem of the latitude variation was of greater value.

The zenith telescope has been the most efficient instrument for tracing by differential observations the very minute quantities involved, tho the contribution from meridian circle observations of a fundamental character must be taken as the basis of the problem. The zenith telescope first used by Professor Doolittle was one that had been virtually discarded by the United States Coast and Geodetic Survey, and had been purchased for service in the instruction of the engineering classes at Lehigh University in practical field astronomy. In addition to comparatively arduous duties in teaching mathematics and astronomy, the observations of latitude were begun as a piece of research work that would be well within his unaided resources, and a possible contribution to science. The first results led him to suspect a secular variation in the latitude of his station. Later discussion of these same observations confirmed the results of the work of Dr. Chandler, mainly based upon meridian circle observations up to that date. Those results, it may be remarked, were not at once accepted unanimously by the profession, and were sometimes classed as entirely "empirical" in the nature of the terms included. Of course Dr. Chandler willingly accepted the challenge offered by the use of this word; his constants were empirical ones precisely, as he sought for them in the only way by which an unprejudiced investigator would attack the puzzling and apparently conflicting mass of data existing at that time. The current observations for following the accepted variations of latitude are planned with this definite object in view, and it is not easy for the observers of this year following the war to realize how blind the way to a solution then appeared to be. Those early observations at the Sayre

Observatory show well what can be done with comparatively imperfect apparatus handled by a careful and expert observer.

Born in 1843, Professor Doolittle received his astronomical training under that master of the science, Professor James C. Watson, at the University of Michigan. With one of his classmates, O. S. Wilson, later Superintendent of the New York State Survey, he abandoned his college studies to enlist in the Civil War. It was only after an interval of some years that he was able to return for graduation in 1874, with the degree of C.E. He served on topographical work with the United States Northern Boundary Commission in this interval, along with Professor Lewis Boss, who was making the astronomical observations. For at least part of one winter he lived under canvas amid the extreme rigors of that northern climate.

He was appointed Professor of Mathematics and Astronomy at Lehigh in 1875, and remained there twenty years. He then accepted the similar chair at the University of Pennsylvania, which he held up to the time of his retirement from active work, having been succeeded by his second son, Eric Doolittle. The older son, Charles, has also followed his father's profession as a member of the staff of the Nautical Almanac office at Washington. My own entrance at Lehigh was of the same date (1875), but I did not come under the direct instruction of Professor Doolittle until my junior year. His oldest son was later a student of mine in 1883. Our Society on this coast had the pleasure of having Professor Doolittle and his wife with us at the meeting combined with that of the American Astronomical Society, at Berkeley, in 1915.

Professor Doolittle was twice married, his first wife dying in his first year at Bethlehem. His widow, Helen Wolle Doolittle, was born there. Two of his sons served in the war just closed by armistice, one of whom, Captain Gilbert Doolittle, was killed in France, in September last. The other, Ensign Melvin Doolittle, is still in our service. Four sons and a daughter survive.

Professor Doolittle has been buried at Nisky Hill cemetery, Bethlehem, a beautiful site overlooking the rapid river named to carry on the traditions of the early days of the Indians, so successfully converted at the old Moravian settlement. He was a man of singularly modest temperament, genial in manner and straightforward in character. These qualities were recognized by his students—one of the real tests of a man—as they have been by a wide circle of friends.

R. H. TUCKER.

March 20, 1919.